

Morgan's Norms	phoria	ABduction (BI or NRV)	ADduction (BO or PRV)	infra (BU)	supra (BD)	NRA/PRA
6 M	0-2 XP	x/5/3	7/15/8	3/1	3/1	
40 cm	0-6 XP	11/19/10	14/18/7			+1.75/-1.75

Difference in Phoria	Change from 6
0,1	0
2,3	1
4,5,6	2
7,8	3
9,10	4

NPA:	Minimum is 15 - 0.25(age) Expected: Each eye within 0.50D for monocular
NPC:	≤ 9 cm
Pupils:	-<0.4 mm difference to not have anisocoria -Direct response should equal the consensual response to light -Swing Test: no change in pupil size -The pupil response (constriction) to near fixation should not be greater than the direct response -Also note lid position PERRLA (Pupils Equal, Round, React to Light and Accommodation)
Versions:	Smooth and accurate pursuit movements in the 9 cardinal positions of gaze, in patients older than 6 without any mental or neurological problems. "SAFE" (Smooth, Accurate, Full, Extensive)
AC/A:	Calculated AC/A: 4/1 - 6/1 (with an average of 5/1 as estimated through Morgan's norms of 1 exo at dist. and 3 exo at near. Gradient AC/A: 3/1 - 5/1)
Tonometry:	8-21 normal range (with 15-16 normally) Normal diurnal variation: 3-6 mmHg
NRA:	minimum of +1.75 D; expected is between +2.00 and +2.50 (because target is at 40 cm to start) Limited by poor ability to relax accomm. and/or reduced positive fusional vergence ability
PRA:	minimum is -1.75 D for nonpresbyopes Limited by accomm. amplitude, poor negative fusional vergence and/or a high AC/A
Flipper Test:	Adults: At most 90 sec/20 cycles with +/- 1.50D flippers at 40 cm. Children: At most 75sec/10 cycles with +/- 2.00D flippers at 33 cm.
TBUT:	>10 sec
Fast. Glu.:	70 to 99 mg/dL
Normal ON:	Rim width: ISNT (wide → narrow), cupping/pallor same size C/D: Caucasian: 0.49 Af. Amer: 0.56 [IN GLC, ISTN (inferior starts to narrow)]
AV ratio:	Artery is 2/3-3/4 of vein, observe ~2DD away from ONH
Art. Reflex:	1/4 - 1/3 vessel width
Reflex fus. stress:	6BI @ 40cm: <25 sec for 10 cycles 6BO @ 40cm: <25 sec for 10 cycles
Refractive Error:	Newborn: +2.00D Age 6: +1.00 - +0.50D Age 10: plano >10 yrs: Skewed toward myopia Astigmatism: WTR up to age 40 ATR after age 40 Gain 0.25D ATR for every 10 years of age
Exophthalmometry	Normal: 16-22mm 3mm difference btwn eyes significant Asian: 16mm; Caucasian 18mm; Af. Am.: 20mm
X-cyl:	Binocular: +1.00D; Monocular: +0.50D

Randot	'@ 40cm
1 L	400
2 R	200
3 L	140
4 M	100
5 R	70
6 M	50
7 L	40
8 R	30
9 M	25
10 R	20
A Cat	400
B Rabbit	200
C Monkey	100

cm	D
20	5
19	5.26
18	5.6
17	6
16	6.25
15	6.7
14	7
13	7.8
12	8
11	9
10	10
9	11
8	12-13
7	14
6	16-17
5	20
4	25
3	33
2	50
1	100

Systolic	Diastolic	Stage	Follow-up
<120	<80	Normal	Recheck in 2 years
120-139	80-89	Prehypertension	Recheck in 1 year
140-159	90-99	Stage 1	Confirm within 2 mos.
160 or >	100 or >	Stages 2 & 3	Evaluate or refer in 1mo/1wk
>210	>120	Stage 4	Go to ER
Pulse Pressure: 40 mmHg			